



17th Steering Committee Meeting at Coconut Research Institute, Lunuwila

COGENT gives the opportunity to
build international projects
in the most efficient way, and is the only way to
get a global appraisal of coconut conservation





cirad

AGRICULTURAL RESEARCH
FOR DEVELOPMENT

**Working
together for
tomorrow's
agriculture**

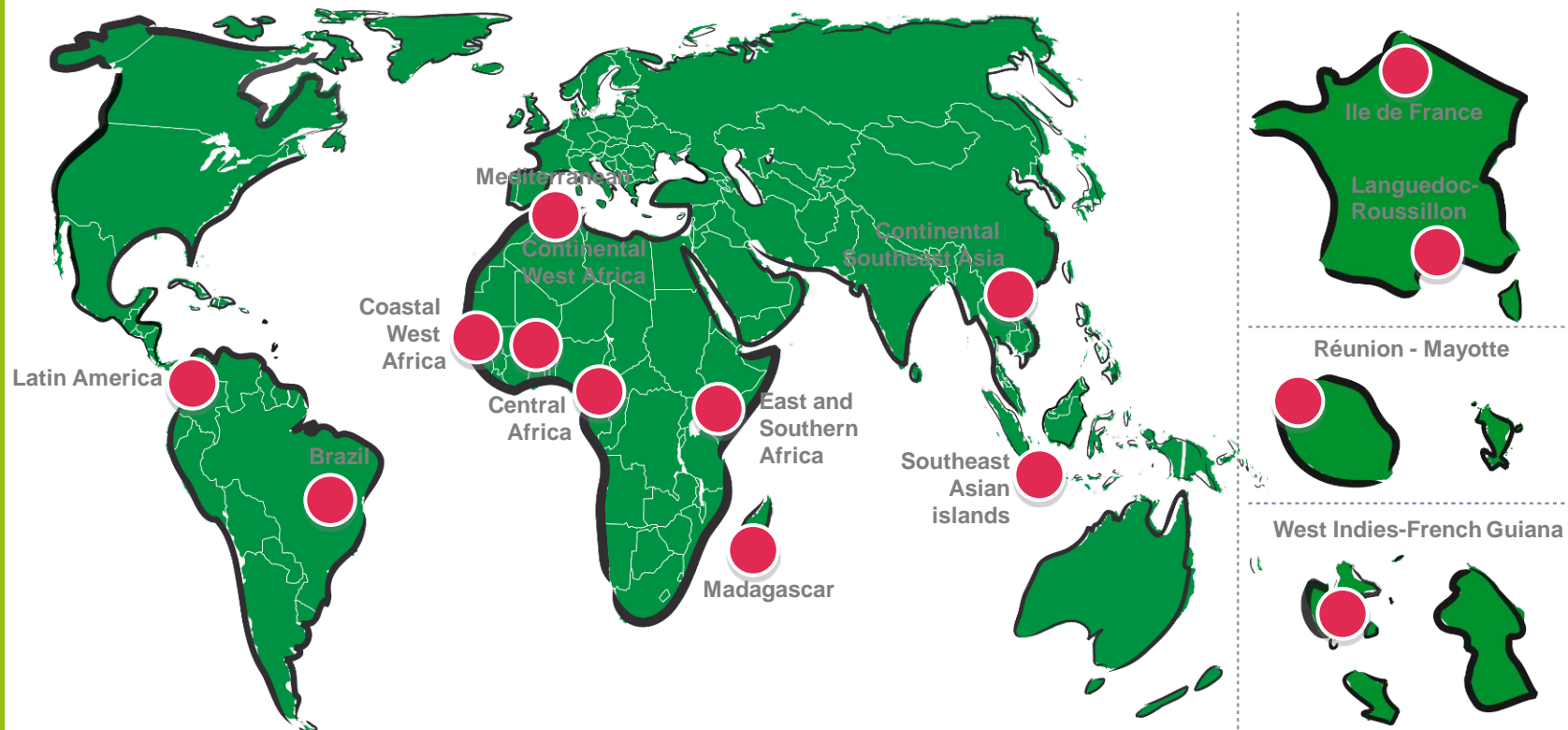
An original research organization

- National public institution status, but a global mission
- Targeted research for development
- Based on 50 years' experience in the field combined to an original approach



CIRAD worldwide

12 regional offices in the French overseas regions and abroad



A scientific hub in Montpellier

700 staff members based outside metropolitan France

One main operating principle: research in partnership

- Working together to establish and implement priorities
- Working in the South, where our partners are, in their laboratories or in their fields
- Building scientific capacity



Training the talents of the future: the need to link research and higher education



More than **300** PhD students supervised each year, **60 %** of them from the South



800 researchers and technicians received and trained each year



International Masters courses run with grandes écoles and universities

CIRAD and coconut sector

- Breeding, genomics (L. Baudouin, R. Bourdeix, JP Labouisse)
- Agronomy (X. Bonneau, J. Ollivier)
- LYTS (M. Dollet, F. Pilet)
- Biofuel (A. Liennard, G. Vaitilingom)
- Coconut wood (H. Baillères)
- Coconut processing and products quality (A. Prades)
- Carbon sequestration (O. Roupsard)
- Entomology (L. Ollivier)
- GIS (G. Coppens)

Coconut water preparation



Morphometric analyses



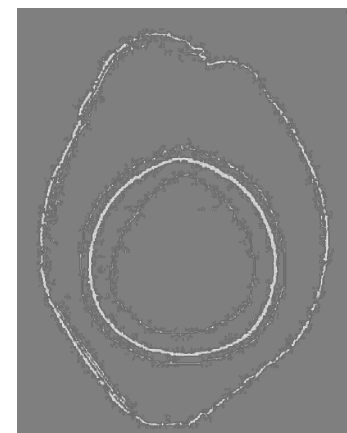
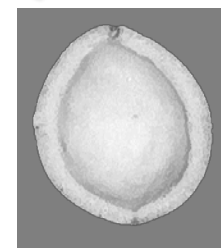
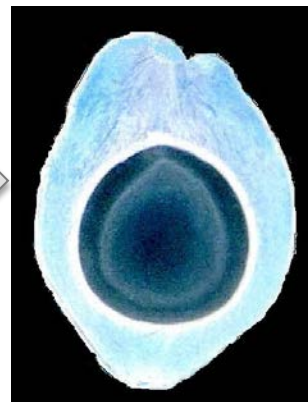
Kernel preparation



CIRAD
Laboratory/
Analyses

Partners: **Vanuatu** (CARFV), **Ivory Coast** (CNRA, University of Cocody)

Computer Coconut Digital Image Analysis



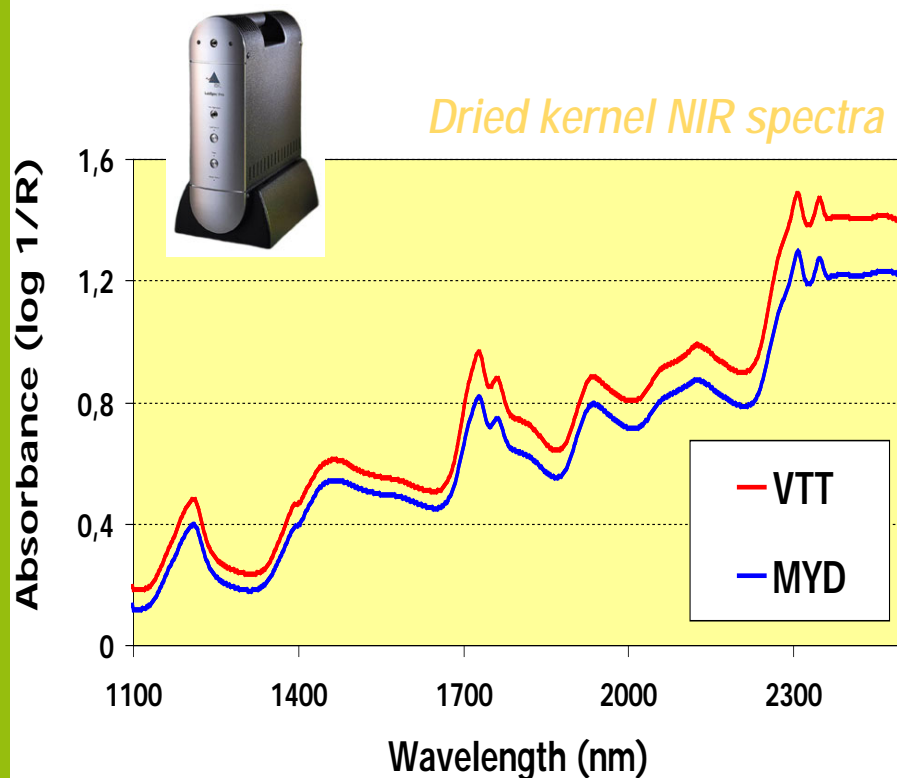
Coconut global Shape and Volume	
Meat & Cavity Shape	
Husk, Shell and Meat Thickness...	

Sheet 1

Sheet 2

Total duration of analysis = less than 1 min/picture

Near Infra-Red Spectroscopy (NIRS)



Database and calibration



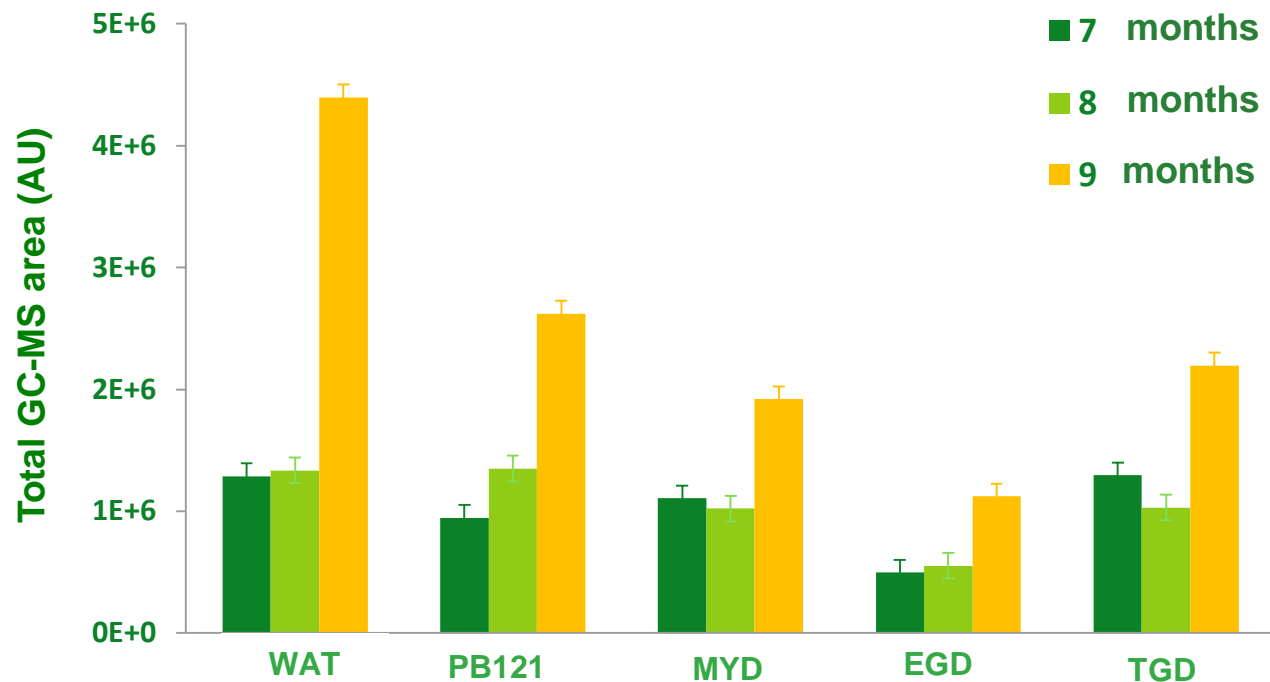
- Moisture content
- Fat Content
- Protein Content
- Carbohydrates content...



**Total duration
of analysis =
5 min.**

Impact of Variety and Stage of Maturity on CW volatile compounds

55 components detected / 41 identified
Ketones, alcohols, aldehydes, acids, esters, lactones...



Vegetable oils as fuel for boats...Science fiction?



No, it's running now in South of France !

With canola and sunflower oil



Thank you

